



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,523	10/19/2001	Geetha Pannala	1011-59279	9975
24197	7590	12/23/2003	EXAMINER	
KLARQUIST SPARKMAN, LLP			TAT, BINH C	
121 SW SALMON STREET			ART UNIT	
SUITE 1600			PAPER NUMBER	
PORTLAND, OR 97204			2825	

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/045,523

Applicant(s)

PANNALA ET AL.

Examiner

Binh C. Tat

Art Unit

2825

-- **Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

DETAILED ACTION

1. This office action is in response to application 10/045523 filed on 10/19/01.

Claims 1-41 remain pending in the application.

*Claim Objections*

2. Claim 15-17 objected to because of the following informalities: The claim 14 claims about an article and claims 15-17 are dependent on claim 14 therefore it should claim about the article not the media. Appropriate correction is required.

3. Claim 19-21 objected to because of the following informalities: The claim 18 claims about an article and claims 19-21 are dependent on claim 18 therefore it should claim about the article not the media. Appropriate correction is required.

4. Claim <sup>23-24</sup>~~15-17~~ objected to because of the following informalities: The claim 22 claims about an article and claims 23-24 are dependent on claim <sup>22</sup>~~14~~ therefore it should claim about the article not the media. Appropriate correction is required.

5. Claim 26 objected to because of the following informalities: The claim 25 claims about an article and claim 26 are dependent on claim 25 therefore it should claim about the article not the media. Appropriate correction is required.

*Oath/Declaration*

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
It does not identify the city and either state or foreign country of residence of each inventor. The residence information may be provided on either on an application data sheet or supplemental oath or declaration.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Dutta et al. (US Patent 6349403).

7. As to claims 1 (method), 14(machine readable media), and 27 (apparatus), Dutta et al. teach A computer-implemented method, comprising: inputting a netlist (see col 1 lines 24 - col 2 lines 24 and background); generating symbols and connections formed according to the netlist and a selected wiring harness layout dimension (see fig 3-5 and col 6 lines 55- col 9 lines 65); and generating a wiring harness diagram along the layout dimension according to the symbols and the connections (see fig 5-9 and col 8 lines 65- col 13 lines 65).

8. As to claims 2 (method), 15(machine readable media), and 28 (apparatus) Dutta et al. teach in which generating the wiring harness diagram further comprises: sorting the netlist at least in part according to the connectivity strength of at least one pair of symbols (see fig 5-9 and col 8 lines 65- col 13 lines 65).

9. As to claim 3 (method), 16(machine readable media), and 29 (apparatus), Dutta et al. teach in which generating the symbols further comprises: positioning a pin on a side of a first

Art Unit: 2825

symbol, the side selected according to (a) a connection between the first symbol and a second symbol, and (b) the layout dimension (see fig 7-10 and fig 15 col 12-lines 49-col 13-43).

10. As to claims 4 (method), 17(machine readable media), and 30 (apparatus) Dutta et al. teach further comprising: sequencing symbol placement for the wiring harness diagram such that symbols with predetermined pin positions are placed in the layout with higher priority than symbols for which the side of the symbol for placing a pin may be selected (see fig 7-10 and fig 15 col 12-lines 49-col 13-43).

11. As to claims 5 (method), 18(machine readable media), and 31(apparatus) Dutta et al. teach a computer-implemented method, comprising: sequencing symbol placement in a wiring harness layout at least in part according to the connectivity strength of at least one pair of symbols (see fig 5-9 and col 8 lines 65- col 13 lines 65); and generating a wiring harness diagram according to the layout (see fig 7-10 and fig 15 col 12-lines 49-col 13-43 and background and summary).

12. As to claims 6 (method), 19(machine readable media), and 32(apparatus) Dutta et al. teach further comprising: selecting a side of a first symbol on which to position a pin to increase the directness of connectivity between the first symbol and a second symbol (see fig 7-10 and fig 15 col 12-lines 49-col 13-43 and background).

13. As to claims 7 (method), 20(machine readable media), and 33(apparatus) Dutta et al. teach n which generating a wiring diagram according to the layout further comprises: selecting sides of the symbols on which to position pins according to a selected layout dimension, and arranging the pins on the selected sides to increase the directness of connections between the symbols (see fig 5-7 col 9 lines 18- col 13 lines 5).

Art Unit: 2825

14. As to claims 8 (method), 21(machine readable media), and 34(apparatus) Dutta et al. teach sequencing symbol placement for the wiring harness diagram such that symbols with predetermined pin positions are placed in the layout with higher priority than symbols for which the side of the symbol for placing a pin may be selected (see fig 5-7 col 9 lines 18- col 13 lines 5).

15. As to claim 9 (method), 22(machine readable media), and 35 (apparatus) Dutta et al. teach a computer-implemented method, comprising: sequencing symbol placement in a wiring harness layout at least in part according to the connectivity strength of at least one pair of symbols (see fig 5-9 and col 8 lines 65- col 13 lines 65); and selecting a side of a first symbol on which to place a pin to increase the directness of connectivity between the first symbol and a second symbol (see fig 5-7 col 9 lines 18- col 13 lines 5).

16. As to claims 10(method), 23(machine readable media), and 36(apparatus) Dutta et al. teach in which selecting the side of the first symbol further comprises: selecting the side according to a selected layout dimension and a position of the second symbol (see fig 5-7 col 9 lines 18- col 13 lines 5).

17. As to claims 11 (method), 24(machine readable media), and 37 (apparatus) Dutta et al. teach further comprising: sequencing symbol placement for the wiring harness diagram such that symbols with predefined pin positions are placed in the layout with higher priority than symbols for which the side of the symbol for placing a pin may be selected (see fig 7-10 and fig 15 col 12-lines 49-col 13-43 and background).

18. As to claims 12 (method), 25(machine readable media), and 38 (apparatus) Dutta et al. teach A computer-implemented method, comprising: when at least one first pair of symbols of a

Art Unit: 2825

netlist has been placed in a wiring harness layout, selecting a next pair of symbols to place in the layout comprising at least one symbol of the first pair (see fig 5-9 and col 8 lines 65- col 13 lines 65); and when there is at least one predefined symbol in the netlist, selecting as the next pair of symbols a pair of symbols having the highest connection strength and comprising a predefined symbol (see fig 7-10 and fig 15 col 12-lines 49-col 13-43 and background and summary).

19. As to claims 13 (method), 26(machine readable media), and 39 (apparatus) Dutta et al. teach further comprising: selecting for the placement of pins a side of one symbol of the next pair of symbols (see fig 7-10 and fig 15 col 12-lines 49-col 13-43 and background and summary); and arranging the pins along the side to increase the directness of connection between the next pair of symbols (see fig 7-10 and fig 15 col 12-lines 49-col 13-43 and background and summary).

20. As to claims 40 Dutta et al. teach a carrier wave, comprising: signals defining component symbols and connections generated according to a netlist and a selected wiring harness layout dimension, the symbols and connections defining a wiring harness diagram along the layout dimension (see fig 5-9 and col 8 lines 65- col 13 lines 65).

21. As to claims 41 Dutta et al. teach A carrier wave, comprising: signals defining a first and second component symbols, the component symbols comprising pins, the pins positioned on sides of the symbols selected to increase the directness of connectivity between the first symbol and the second symbol (see fig 5-9 and col 8 lines 65- col 13 lines 65).

Art Unit: 2825

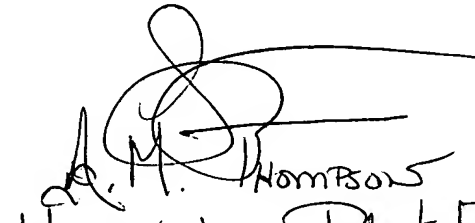
*Conclusion*

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh C. Tat whose telephone number is (703) 305-4855. The examiner can normally be reached on 7:30 - 4:00 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew Smith can be reached on (703) 308-1323. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Binh Tat  
Art Unit 2825  
December 15, 2003

  
A. M. Thompson  
Master's Level Patent Examiner  
Technology Center 2800